

ischiodic foramen oval, of moderate size. Cotyloid cavities placed near the centre of the pelvis; os pubis not continued far downwards, with the extremity inclined upwards and inwards.

Scapulars broad, widest near their extremities, which are pointed.

The skeleton was too much injured to enable me to make out the numbering of the vertebrae with certainty.

REMARKS.—In the anatomy of the soft parts, as far as I could make them out from a much damaged specimen, and in the skeleton, a great preponderance is shown in favour of the genus *Merops* being classed with the Kingfishers, which indeed might be expected from the external structure; and in those points in which it differs it appears to approach the Humming Birds, a group which I think must also be classed among the fissirostral or volitorial division of birds.

The sternum, in having two posterior fissures on each side, agrees with the Kingfishers, but is altogether longer and has a deeper keel in proportion to its length, and the inferior edge of it is more rounded than in that family, in which particulars it appears to approach the Humming Birds.

The coracoids and humerus are proportionally shorter, although of nearly the same form as among the *Alcedinidæ*: these portions of the skeleton are found remarkably short among the Humming Birds.

In the structure of the pelvic-bones, the os furcatum, and ribs, *Merops* agrees precisely with the typical Kingfishers.

LII.—*A Catalogue of Fossil Fish in the Collections of the EARL OF ENNISKILLEN, F.G.S., &c. and SIR PHILIP GREY EGERTON, Bart., F.R.S., &c.\**

GENUS and SPECIES.	Formation.	Locality.
<i>Acanthoderma spinosum</i> ...	Black schist.....	Engi.
<i>Acanthopleurus serratus</i> ...	Do. ....	Ib.
<i>Acanus arcuatus</i> .....	Do. ....	Ib.
— <i>oblongus</i> .....	Do. ....	Ib.
<i>Acipenser Toliapicus</i> .....	London clay ...	Sheppy.
<i>Acrodus Anningiæ</i> .....	Lias .....	Lyme Regis.
— <i>Braunii</i> .....	Grés bigarré ...	Deux Ponts.
— <i>Gaillardoti</i> .....	Muschelkalk ...	Bayreuth.
— <i>gibberulus</i> .....	Lias .....	Lyme Regis.
— <i>latus</i> .....	Do. ....	Ib.

\* This Catalogue has been printed for private distribution by Sir Philip Grey Egerton, to whose kindness we are indebted for permission to insert it.

GENUS and SPECIES.	Formation.	Locality.
<i>Acrodus leiodus</i> .....	Great Oolite ...	Stonesfield.
— <i>minimus</i> .....	Muschelkalk ? ...	Axmouth.
— <i>nobilis</i> .....	Lias .....	Lyme Regis.
<i>Acrolepis asper</i> .....	Kupfer-schiefer	Mansfeld.
— <i>Sedgwickii</i> .....	Mag. Limestone	Ferry Hill.
<i>Ætobates irregularis</i> .....	London clay ...	Sheppy.
<i>Amblypterus eupterygius</i> ..	Coal formation...	Lebach.
— <i>lateralis</i> .....	Do. ....	Ib.
— <i>latus</i> .....	Do. ....	Ib.
— <i>macropterus</i> .....	Do. ....	Ib.
<i>Amblyurus macrostomus</i> ...	Lias .....	Street.
<i>Anenchelum dorsale</i> .....	Black schist.....	Engi.
— <i>Glarisianum</i> .....	Do. ....	Ib.
— <i>heteropleurum</i> .....	Do. ....	Ib.
— <i>isopleurum</i> .....	Do. ....	Ib.
— <i>latum</i> .....	Do. ....	Ib.
<i>Aspidorhynchus acutirostris</i>	Oolite .....	Solenhofen.
— <i>Anglicus</i> .....	Lias .....	Whitby.
— <i>Comptoni</i> .....	Chalk ?.....	Brazil.
— <i>mandibularis</i> .....	Oolite .....	Solenhofen.
<i>Asteracanthus ornatissimus</i>	Kimmeridge clay	Shotover.
— <i>semisulcatus</i> .....	Great Oolite ...	Stonesfield.
<i>Asteroptychius ornatus</i> .....	Carb. Limestone	Armagh.
<i>Atherina macrocephala</i> .....	Eocene.....	Monte Bolca.
<i>Aulolepis typus</i> .....	Chalk .....	Kent.
<i>Belonostomus acutus</i> .....	Lias .....	Whitby.
— <i>leptosteus</i> .....	Great Oolite ...	Stonesfield.
— <i>Münsteri</i> .....	Oolite .....	Solenhofen.
— <i>tenellus</i> .....	Lias .....	Lyme.
<i>Beryx microcephalus</i> .....	Chalk .....	Kent.
— <i>ornatus</i> .....	Do. ....	Ib.
— <i>radians</i> .....	Do. ....	Ib.
<i>Blochius longirostris</i> .....	Eocene.....	Monte Bolca.
<i>Carangopsis dorsalis</i> .....	Do. ....	Ib.
— <i>latior</i> .....	Do. ....	Ib.
<i>Carcharias grosseserratus</i> ...	Tertiary beds ...	Maryland.
— <i>macrodon</i> .....	Do. ....	Ib.
— <i>megalodon</i> .....	Do. ....	Malta.
— <i>megalotis</i> .....	Do. ....	Maryland.
— <i>minor</i> .....	Do. ....	Ib.
— <i>polygyrus</i> .....	Do. ....	Ib.
— <i>productus</i> .....	Do. ....	Malta.
— <i>subserratus</i> .....	London clay.....	Sheppy.

GENUS and SPECIES.	Formation.	Locality.
<i>Caturus furcatus</i> .....	Oolite .....	Eichstadt.
— <i>macrodus</i> .....	Do. ....	Solenhofen.
— <i>macrurus</i> .....	Do. ....	Ib.
— <i>maximus</i> .....	Do. ....	Ib.
— <i>microchirus</i> .....	Do. ....	Ib.
— <i>pachyurus</i> .....	Do. ....	Ib.
— <i>pleiodus</i> .....	Great oolite .....	Stonesfield.
<i>Ceratodus altus</i> .....	Muschelkalk? ...	Aust.
— <i>gibbus</i> .....	Do. ....	Ib.
— <i>planus</i> .....	Do. ....	Ib.
<i>Cheiracanthus microlepidotus</i>	Old Red .....	Lethen.
— <i>minor</i> .....	Do. ....	Stromness.
<i>Cheirolepis Cummingiæ</i> ..	Do. ....	Lethen.
— <i>Traillii</i> .....	Do. ....	Stromness.
<i>Chimæra Agassizii</i> .....	Green sand .....	Maidstone.
— <i>brevirostris</i> .....	Galt .....	Folkstone.
— <i>Colei</i> .....	Great Oolite ...	Stonesfield.
— <i>Egertoni</i> .....	Kimmeridge clay	Shotover.
— <i>Mantellii</i> .....	Chalk .....	Sussex.
— <i>neglecta</i> .....	Great Oolite ...	Stonesfield.
— <i>Owenii</i> .....	Do. ....	Ib.
— <i>Townshendii</i> .....	Purbeck stone ...	Garsington.
<i>Chomatodus cinctus</i> .....	Carb. Limestone	Bristol.
— <i>linearis</i> .....	Do. ....	Ib.
— <i>truncatus</i> .....	Do. ....	Armagh.
<i>Chondrosteus acipenserides</i>	Lias .....	Lyme.
<i>Cladocyclus Gardneri</i> .....	Chalk?.....	Brazil.
— <i>Lewesiensis</i> .....	Do. ....	Kent.
<i>Cladodus mirabilis</i> .....	Carb. Limestone	Bristol.
— <i>striatus</i> .....	Do. ....	Armagh.
<i>Clupea Beurardi</i> .....	Tertiary beds ...	Lebanon.
— <i>brevis</i> .....	Black schist.....	Engi.
— <i>catopygoptera</i> .....	Eocene.....	Monte Bolca.
— <i>megaptera</i> .....	Black schist.....	Engi.
— <i>minuta</i> .....	Eocene.....	Monte Bolca.
— <i>Scheuchzeri</i> .....	Black schist.....	Engi.
— <i>tenuissima</i> .....	Pleistocene .....	Sicily.
<i>Cobitis cephalotes</i> .....	Tertiary beds ...	Eningen.
<i>Coccosteus latus</i> .....	Old Red .....	Stromness.
— <i>oblongus</i> .....	Do. ....	Lethen.
<i>Cochliodus acutus</i> .....	Carb. Limestone	Armagh.
— <i>contortus</i> .....	Do. ....	Bristol.
— <i>magnus</i> .....	Do. ....	Armagh.
— <i>oblongus</i> .....	Do. ....	Ib.
— <i>striatus</i> .....	Do. ....	Ib.
<i>Cœlacanthus gracilis</i> .....	—	—

GENUS and SPECIES.	Formation.	Locality.
<i>Cœlacanthus granulatus</i> ...	Mag. Limestone	Ferry Hill.
— <i>lepturus</i> .....	Coal shale .....	Leeds.
<i>Cœlopoma Colei</i> .....	London clay ...	Sheppy.
— <i>lave</i> .....	Do. ....	Ib.
<i>Conodus ferox</i> .....	Lias .....	Lyme.
<i>Cottus brevis</i> .....	Tertiary beds ...	Eningen.
<i>Ctenacanthus brevis</i> .....	Carb. Limestone	Bristol.
— <i>heterogyrus</i> .....	Do. ....	Armagh.
— <i>major</i> .....	Do. ....	Bristol.
— <i>tenuistriatus</i> .....	Do. ....	Ib.
<i>Ctenolepis cyclus</i> .....	Great Oolite ...	Stonesfield.
<i>Ctenoptychius apicalis</i> .....	Coal shale .....	Stafford.
— <i>dentatus</i> .....	Carb. Limestone	Armagh.
— <i>marginalis</i> .....	Do. ....	Ib.
— <i>pectinatus</i> .....	Coal shale .....	N. Wales.
— <i>radicans</i> .....	Carb. Limestone	Armagh.
— <i>sagittatus</i> .....	Do. ....	Ib.
— <i>serratus</i> .....	Do. ....	Ib.
<i>Cybium-macropomum</i> .....	London clay ...	Sheppy.
<i>Cyclurus minor</i> .....	Tertiary beds ...	Eningen.
<i>Dapedius arenatus</i> .....	Lias .....	Lyme.
— <i>Colei</i> .....	Do. ....	Ib.
— <i>granulatus</i> .....	Do. ....	Ib.
— <i>micans</i> .....	Do. ....	Whitby.
— <i>orbis</i> .....	Do. ....	Barrow.
— <i>politus</i> ...	Do. ....	Lyme.
— <i>punctatus</i> .....	Do. ....	Ib.
<i>Dentex breviceps</i> .....	Eocene.....	Monte Bolca.
<i>Dercetis elongatus</i> .....	Chalk .....	Kent.
<i>Diodon erinaceus</i> .....	Eocene.....	Monte Bolca.
— <i>Scillæ</i> .....	Tertiary beds ...	Malta.
<i>Diplacanthus crassispinus</i> .	Old Red .....	Stromness.
— <i>longispinus</i> .....	Do. ....	Lethen.
— <i>striatulus</i> .....	Do. ....	Ib.
<i>Diplodus gibbosus</i> .....	Coal shale .....	Staffordshire.
<i>Diplopterus borealis</i> .....	Old Red .....	Stromness.
— <i>carbonarius</i> .....	Coal shale .....	Leeds.
— <i>macrocephalus</i> .....	Old Red .....	Lethen.
<i>Dipterus macrolepidotus</i> ..	Do. ....	Caithness.
<i>Ductor leptosomus</i> .....	Eocene.....	Monte Bolca.
<i>Enchodus halocyon</i> .....	Chalk .....	Kent.

GENUS and SPECIES.	Formation.	Locality.
<i>Ephippus longipennis</i> .....	Eocene.....	Monte Bolca.
<i>Esox lepidotus</i> .....	Tertiary beds ...	Eningen.
<i>Eugnathus chirotes</i> .....	Lias .....	Lyme.
— <i>fasciculatus</i> .....	Do. ....	Whitby.
— <i>microlepidotus</i> .....	Oolite .....	Solenhofen.
— <i>minor</i> .....	Lias .....	Lyme.
— <i>ornatus</i> .....	Do. ....	Ib.
— <i>orthostomus</i> .....	Do. ....	Ib.
— <i>polyodon</i> .....	Do. ....	Ib.
— <i>scabriusculus</i> .....	Do. ....	Ib.
— <i>speciosus</i> .....	Do. ....	Ib.
— <i>tenuidens</i> .....	Do. ....	Street.
<i>Eurynotus crenatus</i> .....	Coal formation .	Burdie House.
<i>Fistularia Kœnigii</i> .....	Black schist.....	Engi.
— <i>tenuirostris</i> .....	Eocene.....	Monte Bolca.
<i>Galeus aduncus</i> .....	Molasse .....	Soleure.
— <i>appendiculatus</i> .....	Plänerkalk .....	Stickla.
— <i>falcatus</i> .....	Chalk .....	Kent.
— <i>pristodontus</i> .....	Do. ....	Maestricht.
— <i>semiserratus</i> .....	—	—
— <i>serratus</i> .....	Molasse .....	Soleure.
<i>Gasteronemus rhombeus</i> ...	Eocene.....	Monte Bolca.
<i>Glyptocephalus radiatus</i> ...	London clay ...	Sheppy.
<i>Glyptolepis leptopterus</i> ...	Old Red .....	Lethen.
<i>Gobio analis</i> .....	Tertiary beds ...	Eningen.
<i>Goniognathus coryphænoides</i>	London clay ...	Sheppy.
— <i>maxillaris</i> .....	Do. ....	Ib.
<i>Gyracanthus formosus</i> .....	Coal shale .....	N. Wales.
— <i>tuberculatus</i> .....	Do. ....	N. Shields.
<i>Gyrodon angustus</i> .....	Chalk .....	Maidstone.
— <i>lævior</i> .....	London clay ...	Sheppy.
— <i>trigonus</i> .....	Great Oolite ...	Stonesfield.
— <i>n. s.</i> .....	Do. ....	Ib.
<i>Gyrolepis Albertii</i> .....	Muschelkalk ? ...	Axmouth.
— <i>Rankini</i> .....	Coal shale .....	Leeds.
— <i>tenuistriatus</i> .....	Muschelkalk ? ...	Axmouth.
<i>Gyrosteus mirabilis</i> .....	Lias .....	Whitby.
<i>Helodus didymus</i> .....	Carb. Limestone	Armagh.
— <i>lævissimus</i> .....	Do. ....	Bristol.
— <i>mammillaris</i> .....	Do. ....	Armagh.
— <i>planus</i> .....	Do. ....	Ib.
— <i>simplex</i> .....	Coal shale .....	Staffordshire.
— <i>turgidus</i> .....	Carb. Limestone	Armagh.

GENUS and SPECIES.	Formation.	Locality.
<i>Hemipristis serra</i> .....	Molasse .....	Soleure.
<i>Holocentrum pygæum</i> .....	Eocene.....	Monte Bolca.
<i>Holoptychius granulatus</i> ...	Coal shale .....	Rhuabon.
— <i>Hibberti</i> .....	Coal formation .	Burdie House.
— <i>minor</i> .....	Coal shale .....	Leeds.
— <i>sauroides</i> .....	Do. ....	Ib.
<i>Hybodus acutus</i> .....	Kimmeridge clay	Shotover.
— <i>carinatus</i> .....	Lias .....	Lyme.
— <i>dorsalis</i> .....	Great Oolite ...	Stonesfield.
— <i>ensatus</i> .....	Lias .....	Lyme.
— <i>formosus</i> } .....	Do. ....	Ib.
— <i>grossispinus</i> } .....	Great oolite .....	Stonesfield.
— <i>grossiconus</i> .....	Lias .....	Lyme.
— <i>homoprion</i> } .....	Muschelkalk ...	Bayreuth.
— <i>medius</i> } .....	Great Oolite ...	Stonesfield.
— <i>longiconus</i> .....	Muschelkalk ? ...	Axmouth.
— <i>marginalis</i> .....	Do. ....	Ib.
— <i>minor</i> .....	Great Oolite ...	Stonesfield.
— <i>plicatilis</i> .....		
— <i>polyprion</i> .....		
<i>Hybodus reticulatus</i> } .....	Lias .....	Lyme.
— <i>curtus</i> } .....	Purbeck stone ...	Purbeck.
— <i>incurvus</i> } .....		
— <i>strictus</i> .....		
<i>Hypsodon Lewesiensis</i> .....	Chalk .....	Kent.
— <i>oblongus</i> .....	London clay.....	Sheppy.
— <i>Toliapicus</i> .....	Do. ....	Ib.
<i>Isurus macrurus</i> .....	Black schist.....	Engi.
<i>Labrax schizurus</i> .....	Eocene.....	Monte Bolca.
<i>Lamna acuminata</i> .....	Chalk .....	Sussex.
— <i>contortidens</i> .....	Molasse .....	Soleure.
— <i>cuspidata</i> } .....	Do. ....	Ib.
— <i>denticulata</i> } .....	London clay.....	Sheppy.
— <i>elegans</i> .....		
<i>Lates gracilis</i> .....	Eocene.....	Monte Bolca.
<i>Lebias cephalotes</i> .....	Tertiary beds ...	Sinigaglia.
— <i>crassicaudus</i> .....	Do. ....	Aix.
<i>Lepidotus fimbriatus</i> .....	Lias .....	Lyme.
— <i>Fittoni</i> .....	Wealden .....	Tilgate.
— <i>Mantellii</i> .....	Do. ....	Ib.
— <i>minor</i> .....	Purbeck stone...	Purbeck.
— <i>notopterus</i> .....	Oolite .....	Solenhofen.
— <i>palliatus</i> .....	Kimmeridge clay	Boulogne.
— <i>punctulatus</i> .....	Chalk .....	Kent.
— <i>semiserratus</i> .....	Lias .....	Whitby.
— <i>serratulus</i> .....	Do. ....	Barrow.
— <i>unguiculatus</i> .....	Great Oolite ...	Stonesfield.



GENUS and SPECIES.	Formation.	Locality.
<i>Lepracanthus Colei</i> .....	Coal shale .....	N. Wales.
<i>Leptacanthus semistriatus</i>	Great Oolite ...	Stonesfield.
— <i>serratus</i> .....	Do. ....	Ib.
— <i>tenuispinus</i> .....	Lias .....	Lyme.
<i>Leptolepis Bronnii</i> .....	Lias .....	Lyme.
— <i>caudalis</i> .....	Do. ....	Ib.
— <i>contractus</i> .....	Oolite .....	Solenhofen.
— <i>dubius</i> .....	Do. ....	Ib.
— <i>filipennis</i> .....	Lias .....	Street.
— <i>Knorrii</i> .....	Oolite .....	Solenhofen.
— <i>latus</i> .....	Do. ....	Eichstadt.
— <i>paucispodylus</i> .....	Green sand .....	Kelheim.
— <i>polyspodylus</i> .....	Oolite .....	Solenhofen.
— <i>pusillus</i> .....	Green sand .....	Kelheim.
— <i>sprattiformis</i> .....	Oolite .....	Solenhofen.
— <i>Voithii</i> .....	Green sand .....	Kelheim.
<i>Leuciscus gracilis</i> .....	Tertiary beds ...	Wurtemberg.
— <i>latiusculus</i> .....	Do. ....	Öeningen.
— <i>macrurus</i> .....	Papier-kohl .....	Rhine.
— <i>Öeningensis</i> .....	Tertiary beds ...	Öeningen.
— <i>papyraceus</i> .....	Papier-kohl .....	Rhine.
<i>Lichia prisca</i> .....	Eocene.....	Monte Bolca.
<i>Macropoma Egertoni</i> .....	Galt .....	Speeton.
— <i>Mantellii</i> .....	Chalk .....	Sussex.
<i>Macrosemius brevisrostris</i> ...	Great Oolite ...	Stonesfield.
<i>Mallotus villosus</i> .....	Recent beds .....	Greenland.
<i>Megalichthys Hibberti</i> .....	Coal shale .....	Burdie House.
<i>Megalops priscus</i> .....	London clay.....	Sheppy.
<i>Microdon hexagonus</i> .....	Oolite .....	Solenhofen.
— <i>radiatus</i> .....	Purbeck stone ...	Purbeck.
<i>Mugil princeps</i> .....	Tertiary beds ...	Aix.
<i>Myliobates angustus</i> .....	London clay.....	Sheppy.
— <i>gyratus</i> .....	Do. ....	Ib.
— <i>marginalis</i> .....	Do. ....	Ib.
— <i>nitidus</i> .....	Do. ....	Ib.
<i>Myliobates Stokesii</i> .....	—	—
— <i>Studeri</i> .....	Molasse .....	Soleure.
— <i>subarcuatus</i> .....	London clay.....	Sheppy.
— <i>Toliapicus</i> .....	Do. ....	Ib.
— .....	Crag.....	Norfolk.
<i>Myriacanthus paradoxus</i> ...	Lias .....	Lyme.
— <i>retrosus</i> .....	Do. ....	Ib.
<i>Myripristis homopterygius</i>	Eocene.....	Monte Bolca.
— <i>leptacanthus</i> .....	Do. ....	Ib.

GENUS and SPECIES.	Formation.	Locality.
<i>Nemacanthus brevispinus</i> ...	Great Oolite ...	Stonesfield.
— <i>filifer</i> .....	Muschelkalk? ...	Aust.
<i>Nemopteryx crassus</i> .....	Black schist.....	Engi.
— <i>elongatus</i> .....	Do. ....	Ib.
<i>Notagogus Pentlandi</i> .....	Jura Limestone	Torre d'Orlan- [do.
<i>Nothosomus octostychius</i> ...	Lias .....	Lyme.
<i>Notidanus microdon</i> .....	Chalk .....	Kent.
— <i>primigenius</i> .....	Molasse .....	Soleure.
<i>Odontaspis raphiodon</i> .....	Chalk .....	Maestricht.
<i>Onchus plicatus</i> .....	Carb. Limestone	Armagh.
— <i>rectus</i> .....	Do. ....	Ib.
— <i>subulatus</i> .....	Coal shale .....	Rhuabon.
<i>Ophiopsis dorsalis</i> .....	Purbeck stone ...	Purbeck.
<i>Oracanthus Milleri</i> .....	Carb. Limestone	Bristol.
— <i>minor</i> .....	Do. ....	Armagh.
— <i>pustulosus</i> .....	Do. ....	Bristol.
<i>Orodus ramosus</i> .....	Do. ....	Ib.
<i>Osmeroides Glarisiensis</i> ...	Black schist.....	Engi.
— <i>Lewesiensis</i> .....	Chalk .....	Sussex.
<i>Osteolepis arenatus</i> .....	Old Red .....	Gamrie.
— <i>macrolepidotus</i> .....	Do. ....	Orkney.
— <i>major</i> .....	Do. ....	Lethen.
— <i>microlepidotus</i> .....	Do. ....	Orkney.
<i>Otodus appendiculatus</i> ...	Chalk .....	Sussex.
— <i>crassus</i> .....	—	—
— <i>latus</i> .....	Chalk .....	Maestricht.
— <i>macrotus</i> .....	London clay.....	Sheppy.
— <i>obliquus</i> .....	Do. ....	Ib.
— — .....	Crag .....	Norfolk.
<i>Oxyrhina hastalis</i> .....	Molasse .....	Soleure.
— <i>Mantellii</i> .....	Chalk .....	Sussex.
— <i>quadrans</i> .....	Molasse .....	Soleure.
— <i>xiphodon</i> .....	Tertiary beds ...	Malta.
<i>Pachycormus acutirostris</i> ...	Lias .....	Whitby.
— <i>gracilis</i> .....	Do. ....	Ib.
— <i>latipennis</i> .....	Do. ....	Lyme.
— <i>latirostris</i> .....	Do. ....	Whitby.
— <i>latus</i> .....	Do. ....	Ib.
— <i>leptosteus</i> .....	Do. ....	Lyme.
— <i>macrurus</i> .....	Do. ....	Ib.
— <i>n. s.</i> .....	Do. ....	Whitby.
<i>Palæoniscus Blainvillei</i> ...	Coal formation .	Muse.
— <i>catopterus</i> .....	New Red .....	Roan Hill.
— <i>comtus</i> .....	Mag. Limestone	Ferry Hill.



GENUS and SPECIES.	Formation.	Locality.
<i>Palæoniscus Duvernoy</i> .....	Coal formation .	Zweibrücken.
— <i>Egertoni</i> .....	Coal shale .....	Staffordshire.
— <i>elegans</i> .....	Mag. Limestone	Ferry Hill.
— <i>Freislebeni</i> .....	Kupfer-schiefer .	Mansfeld.
— <i>glaphyrus</i> .....	Mag. Limestone	Ferry Hill.
— <i>longissimus</i> .....	Do. ....	Ib.
— <i>macropomus</i> .....	Zechstein .....	Ilmenau. [way.
— <i>macrophthalmus</i> .....	Mag. Limestone	Clarence Rail-
— <i>magnus</i> .....	Kupfer-schiefer .	Mansfeld.
— <i>Monensis</i> .....	Coal shale .....	Anglesea.
— <i>Robisoni</i> .....	Coal formation .	Burdie House.
— <i>Vratislaviensis</i> .....	New Red .....	Ruppersdorf.
<i>Palæorhynchum Colei</i> .....	Black schist.....	Engi.
— <i>Egertoni</i> .....	Do. ....	Ib.
— <i>Glarisianum</i> .....	Do. ....	Ib.
— <i>latum</i> .....	Do. ....	Ib.
— <i>longirostre</i> .....	Do. ....	Ib.
— <i>medium</i> .....	Do. ....	Ib.
— <i>microspondylum</i> .....	Do. ....	Ib.
<i>Palimphyes brevis</i> .....	Do. ....	Ib.
— <i>longus</i> .....	Do. ....	Ib.
<i>Perca Beaumontii</i> .....	Tertiary beds ...	Aix.
<i>Petalodus Hastingsiæ</i> .....	Carb. Limestone	Ticknall.
— <i>psittacinus</i> .....	Do. ....	Armagh.
— <i>lævissimus</i> .....	Do. ....	Ib.
— <i>rectus</i> .....	Do. ....	Ib.
<i>Pholidophorus Bechei</i> .....	Lias .....	Lyme.
— <i>fusiformis</i> .....	—.....	Castellamare.
— <i>Hastingsiæ</i> .....	Lias .....	Barro w.
— <i>latimanus</i> .....	Oolite .....	Solenhofen.
— <i>latiusculus</i> .....	Lias .....	Lyme.
— <i>latus</i> .....	Oolite .....	Solenhofen.
— <i>leptocephalus</i> .....	Lias .....	Street.
— <i>limbatus</i> .....	Do. ....	Lyme.
— <i>macrocephalus</i> .....	Oolite .....	Eichstadt.
— <i>minor</i> .....	Great Oolite ..	Stonesfield.
— <i>onychius</i> .....	Lias .....	Lyme.
— <i>radians</i> .....	Oolite .....	Eichstadt.
— <i>radiatopunctatus</i> .....	Do. ....	Solenhofen.
— <i>Stricklandi</i> .....	Lias .....	Barrow.
— <i>Taxis</i> .....	Oolite .....	Solenhofen.
— <i>tenuiserratus</i> .....	Green sand .....	Kelheim.
— <i>uræoides</i> .....	Oolite .....	Solenhofen.
<i>Phylodus irregularis</i> .....	London clay.....	Sheppy.
— <i>medius</i> .....	Do. ....	Ib.
— <i>Toliapicus</i> .....	Do. ....	Ib.
<i>Physonemus subteres</i> .....	Carb. Limestone	Armagh.
<i>Pisodus</i> —.....	London clay.....	Hampshire.
<i>Placodus gigas</i> .....	Muschelkalk ...	Bayreuth.
— <i>Münsteri</i> .....	Do. ....	Ib.

GENUS and SPECIES.	Formation.	Locality.
<i>Platax Woodwardii</i> .....	Crag .....	Norfolk.
<i>Platygnathus paucidens</i> ..	Old Red .....	Orkney.
<i>Platysomus gibbosus</i> .....	Kupfer-schiefer .	Eisleben.
— <i>parvulus</i> .....	Coal shale .....	Leeds.
— <i>striatus</i> .....	Mag. Limestone	Ferry Hill.
<i>Pleionemus macrospondylus</i>	Black schist ...	Engi.
<i>Pleuracanthus planus</i> .....	Coal shale .....	Leeds.
<i>Pleurodus affinis</i> .....	Do. ....	Rhuabon.
<i>Pœcilodus Jonesii</i> .....	Carb. Limestone	Armagh.
— <i>obliquus</i> .....	Do. ....	Ib.
— <i>parallelus</i> .....	Do. ....	Ib.
— <i>sublævis</i> .....	Do. ....	Ib.
— <i>transversus</i> .....	Do. ....	Ib.
<i>Pristis Hastingsiæ</i> .....	London clay.....	Hampshire.
<i>Psammodus cornutus</i> .....	Carb. Limestone	Armagh.
— <i>porosus</i> .....	Do. ....	Ib.
— <i>rugosus</i> .....	Do. ....	Ib.
<i>Pterichthys cornutus</i> .....	Old Red .....	Lethen.
— <i>latus</i> .....	Do. ....	Ib.
— <i>Milleri</i> .....	Do. ....	Gamrie.
— <i>productus</i> .....	Do. ....	Lethen.
<i>Pterygocephalus paradoxus</i>	Eocene.....	Monte Bolca.
<i>Ptychodus acutus</i> .....	Galt .....	Folkstone.
— <i>altior</i> .....	Chalk .....	Sussex.
— <i>decurrens</i> .....	Do. ....	Ib.
— <i>gibberulus</i> .....	Do. ....	Ib.
— <i>latissimus</i> .....	Do. ....	Ib.
— <i>mammillaris</i> .....	Do. ....	Ib.
— <i>polygyrus</i> .....	Do. ....	Ib.
— <i>spectabilis</i> .....	Do. ....	Ib.
<i>Ptycholepis Bollensis</i> .....	Lias .....	Whitby.
<i>Pycnodus biserialis</i> .....	Great Oolite ..	Little Gibraltar.
— <i>Bucklandi</i> .....	Do. ....	Stonesfield.
— <i>didymus</i> .....	Do. ....	Ib.
— <i>discoides</i> .....	Do. ....	Little Gibraltar.
— <i>gigas</i> .....	Jura Limestone	Jura.
— <i>Hüggii</i> .....	Great Oolite ...	Stonesfield.
— <i>latirostris</i> .....	Do. ....	Ib.
— <i>Mantellii</i> .....	Do. ....	Tilgate.
— <i>obtusus</i> .....	Great Oolite ..	Stonesfield.
— <i>ovalis</i> .....	Do. ....	Ib.
— <i>parvus</i> .....	Do. ....	Ib. [do.
— <i>rhombus</i> .....	Jura Limestone	Torre d'Orlan-
— <i>rugulosus</i> .....	Great Oolite ...	Stonesfield.
<i>Pygæus Coleanus</i> .....	Eocene .....	Monte Bolca.

GENUS and SPECIES.	Formation.	Locality.
<i>Pygopterus Humboldtii</i> ... — <i>mandibularis</i> .....	Kupfer-schiefer . Mag. Limestone	Mansfeld. Ferry Hill.
<i>Raia antiqua</i> .....	Crag.....	Norfolk.
<i>Rhacolepis brama</i> .....	Chalk ?.....	Brazil.
— <i>buccalis</i> .....	Do. ....	Ib.
— <i>latus</i> .....	Do. ....	Ib.
<i>Rhodeus elongatus</i> .....	Tertiary beds ...	Ēningen.
<i>Saurichthys apicalis</i> .....	Muschelkalk ? ...	Axmouth.
<i>Saurocephalus lanciformis</i> .	Chalk .....	Sussex.
<i>Sauropsis mordax</i> .....	Great Oolite ...	Stonesfield.
<i>Sciænurus Bowerbankii</i> ... — <i>crassior</i> .....	London clay..... Do. ....	Sheppy. Ib.
<i>Scilliodus antiquus</i> .....	Chalk .....	Kent.
<i>Semionotus rhombifer</i> .....	Lias .....	Lyme.
— <i>striatus</i> .....	Do. ....	Seefeld.
<i>Semiophorus velicans</i> .....	Eocene.....	Monte Bolca.
<i>Serranus microstomus</i> .....	Do. ....	Ib.
— <i>occipitalis</i> .....	Eocene .....	Ib.
<i>Smerdis micracanthus</i> .....	Eocene .....	Ib.
— <i>minutus</i> .....	Tertiary beds ...	Aix.
— <i>pygmæus</i> .....	Eocene.....	Monte Bolca.
<i>Sparnodus altivelis</i> .....	Do. ....	Ib.
— <i>macrophthalmus</i> .....	Do. ....	Ib.
— <i>micracanthus</i> .....	Do. ....	Ib.
— <i>ovalis</i> .....	Do. ....	Ib.
<i>Sphærodus gigas</i> .....	Kimmeridge clay	Shotover.
— <i>n. s.</i> .....	Jura Limestone	Jura.
<i>Sphenolepis squamosseus</i> ...	Tertiary beds ...	Aix.
<i>Sphenonchus hamatus</i> .....	Lias .....	Lyme.
<i>Sphyræna gracilis</i> .....	Eocene.....	Monte Bolca.
<i>Sphyrænodus crassidens</i> ... — <i>priscus</i> .....	London clay..... Do. ....	Sheppy. Ib.
<i>Spinacorhinus polyspondylus</i>	Lias .....	Lyme.
<i>Strophodus favosus</i> .....	Great Oolite ...	Stonesfield.
— <i>magnus</i> .....	Do. ....	Ib.
— <i>reticulatus</i> .....	Kimmeridge clay	Shotover.
— <i>subreticulatus</i> .....	Inferior Oolite...	Dundry.
— <i>sulcatus</i> .....	Green sand .....	Maidstone.
— <i>tenuis</i> .....	Great Oolite ...	Stonesfield.

GENUS and SPECIES.	Formation.	Locality.
Tetragonolepis confluens ...	Lias .....	Lyme.
— dorsalis .....	Do. ....	Gloucestersh.
— heteroderma.....	Do. ....	Lyme.
— Leachii.....	Do. ....	Ib.
— leiosomus.....	Do. ....	Ib.
— monilifer .....	Do. ....	Barrow.
— ovalis .....	Do. ....	Whitby.
— pholidotus .....	Do. ....	Lyme.
— pustulatus .....	Do. ....	Ib.
— radiatus .....	Do. ....	Ib.
— speciosus .....	Do. ....	Ib.
— striolatus .....	Do. ....	Barrow.
Tetrapterus priscus .....	London clay.....	Sheppy.
Thrissops formosus .....	Green sand .....	Kelheim.
— salmoncus .....	Oolite .....	Solenhofen.
Thyellina prisca .....	Lias .....	Lyme.
Tinca furcata .....	Tertiary beds ...	Eningen.
Vomer longispinus .....	Eocene.....	Monte Bolca.
Zygæna dubia .....	Molasse .....	Soleure.
New genus .....	Eocene.....	Monte Bolca.
N. S. ....	Chalk .....	Kent.
N. S. ....	Tertiary beds ...	Aix.
N. S. ....	Black schist ...	Greenland.
N. S. ....	Eocene.....	Monte Bolca.

## BIBLIOGRAPHICAL NOTICES.

*Natural History as a Branch of General Education.* By Robert Patterson. Belfast. 8vo, 28 pp. 1840.

THERE are perhaps very few persons who are not sensibly alive to the objects of study which Natural History presents, and yet the proportion of those who pursue any department of it as a science is but small. We may probably find an explanation of this circumstance in the operation of two causes. In the first place, the scientific pursuit of zoology or botany cannot be so profitably applied to the arts by which wealth is accumulated as many other departments of science, amongst which we may mention chemistry and the various branches of natural philosophy. Men of science must live as well as other people; and it is the lot of a few only to be able to pursue science independently of their means of subsistence.

In the second place, Natural History has never occupied a pro-